ABSTRACT OF THE DISCLOSURE

A real-time system incorporating speech recognition and linguistic processing for recognizing a spoken query by a user and distributed between client and server, is disclosed. The system accepts user's queries in the form of speech at the client where minimal processing extracts a sufficient number of acoustic speech vectors representing the utterance. These vectors are sent via a communications channel to the server where additional acoustic vectors are derived. Using Hidden Markov Models (HMMs), and appropriate grammars and dictionaries conditioned by the selections made by the user, the speech representing the user's query is fully decoded into text (or some other suitable form) at the server. This text corresponding to the user's query is then simultaneously sent to a natural language engine and a database processor where optimized SQL statements are constructed for a full-text search from a database for a recordset of several stored questions that best matches the user's query. Further processing in the natural language engine narrows the search to a single stored question. The answer corresponding to this single stored question is next retrieved from the file path and sent to the client in compressed form. At the client, the answer to the user's query is articulated to the user using a text-to-speech engine in his or her native natural language. The system requires no training and can operate in several natural languages.